## **Figures**

Fig 1 - Bird's eye view of the system

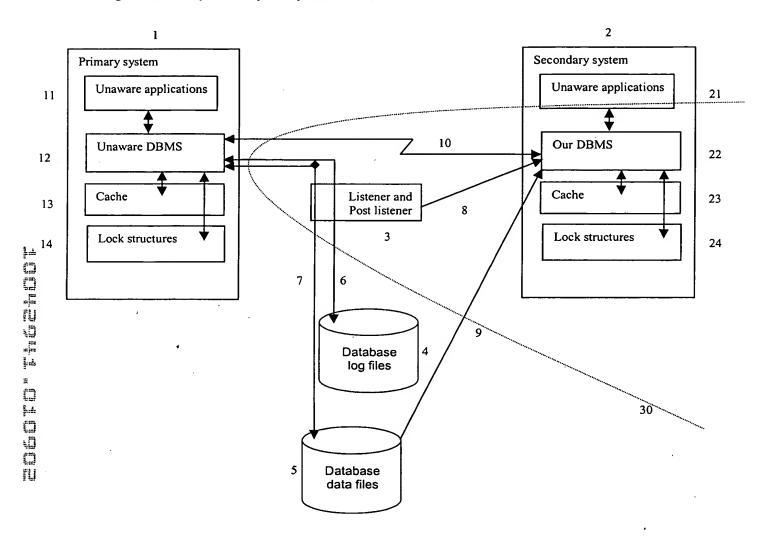


Fig 2 - the structure describing an Item of Interest

101	-102	103	104	105	106	107	108	109	10A
Item type	ID			Locking transaction	Optimization info	List of Pending reads			Our transaction
					100				

Fig3 - The structure describing a transaction

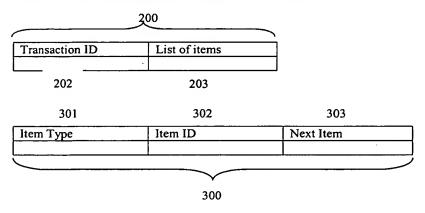
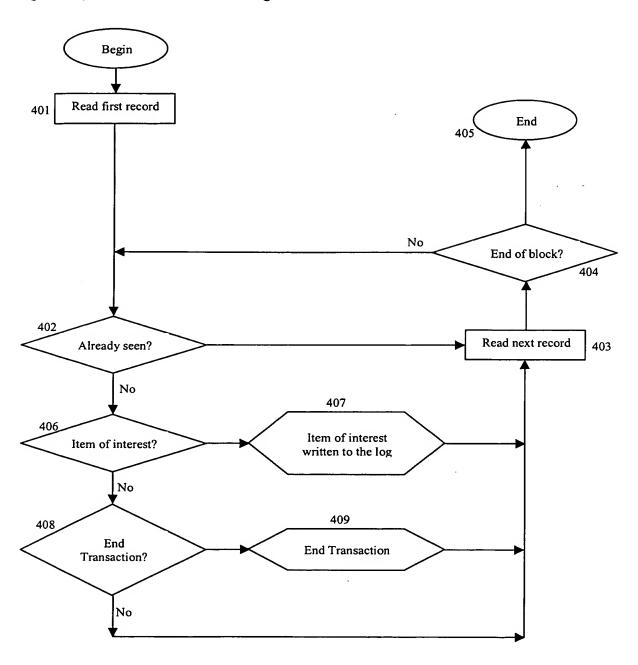
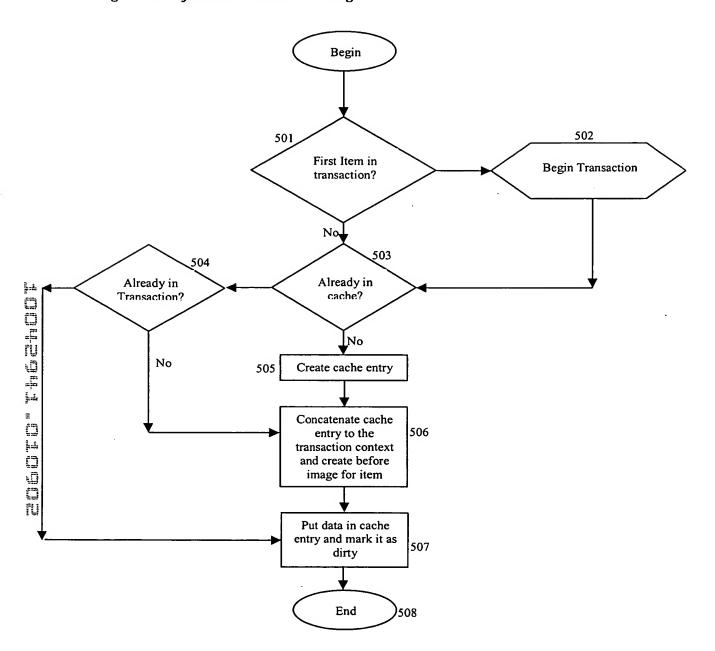


Fig 4 - Physical block written to the log



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Fig 5 -Item of Interest written to the log



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Fig 6 -Begin Transaction

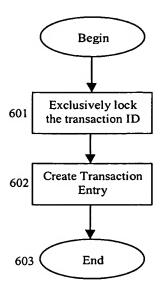


Fig 7 -End Transaction

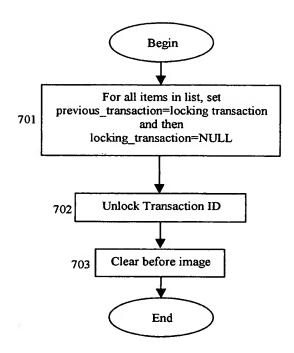


Fig 8 -Physical block written to the database

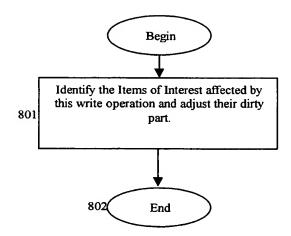
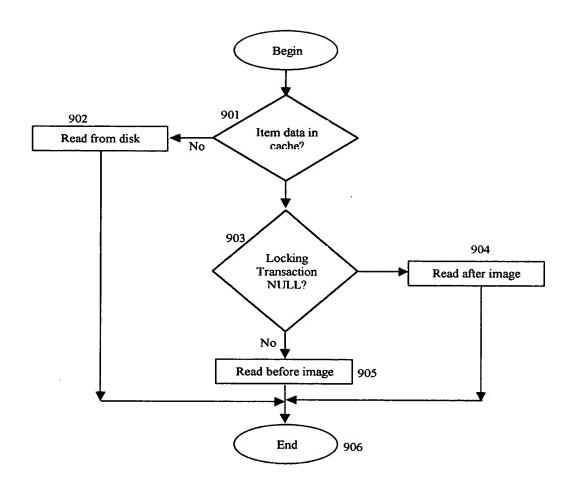
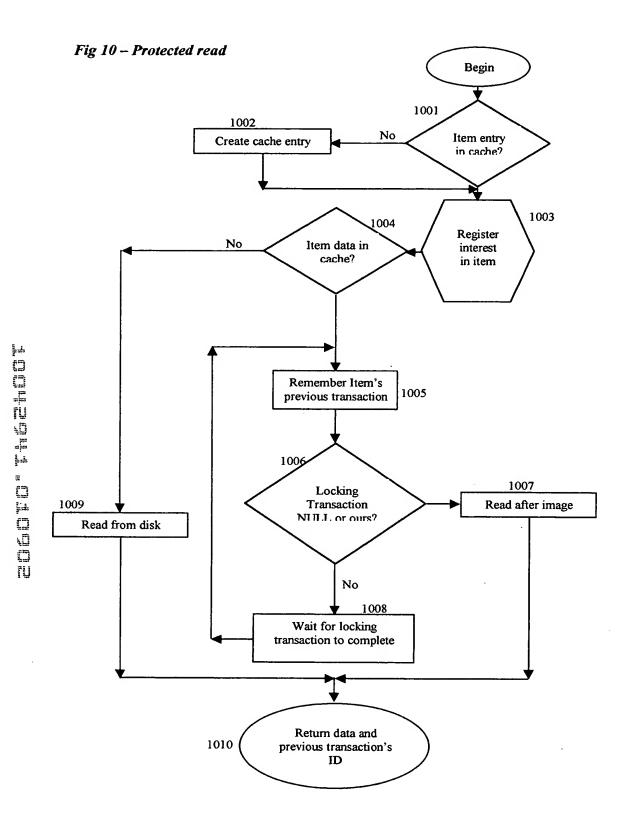


Fig 9 -Unprotected read

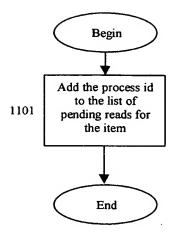


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Fig 11 - Register and unregister interest in item



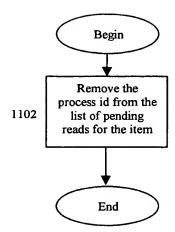
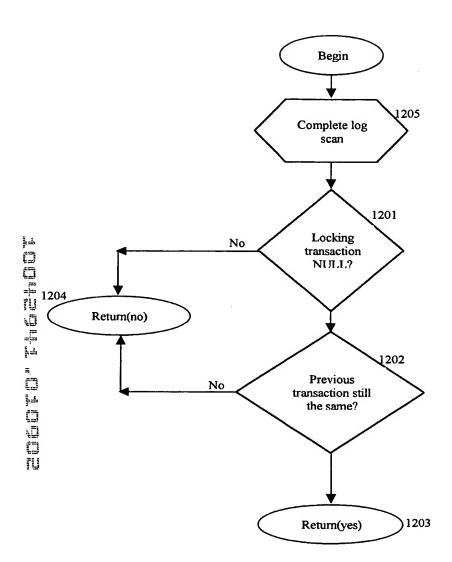
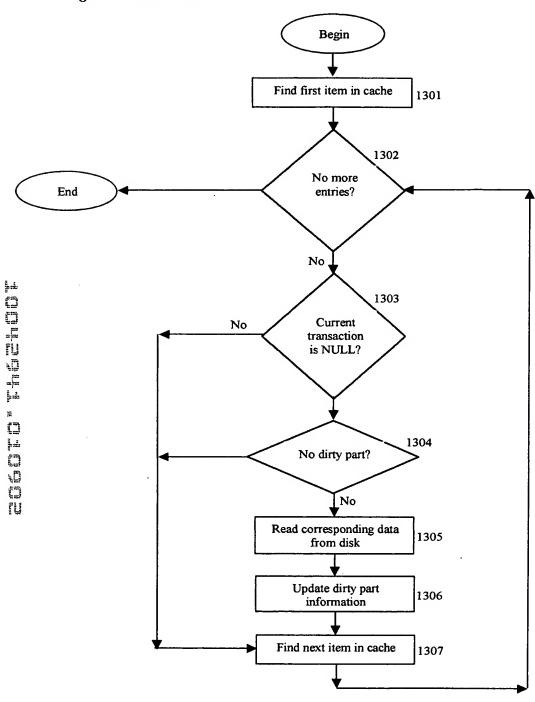


Fig 12 - Check Item validity



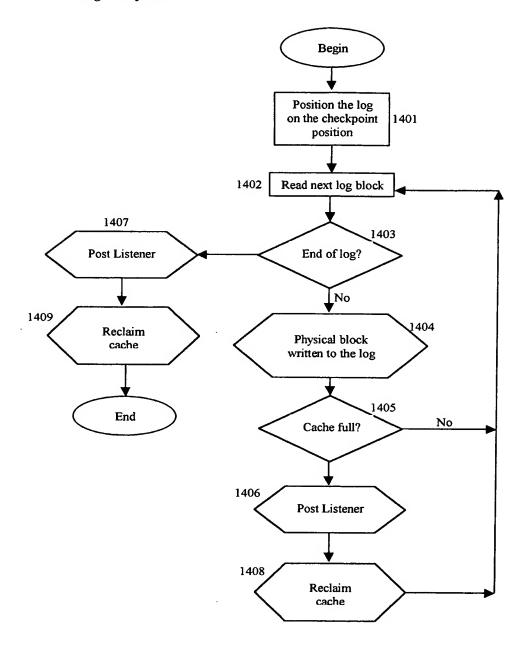
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Fig 13 – Post listener



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Fig 14 - Recovering the system



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Fig 15 - Entries in the Process items list

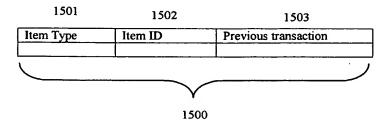
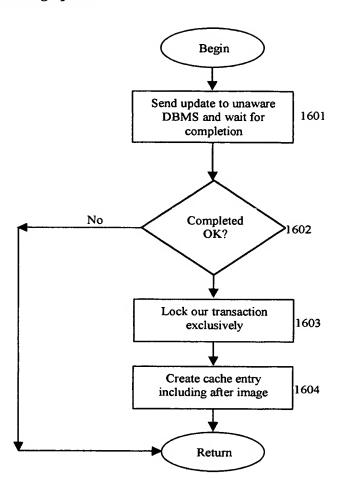


Fig 16 - Initiating update



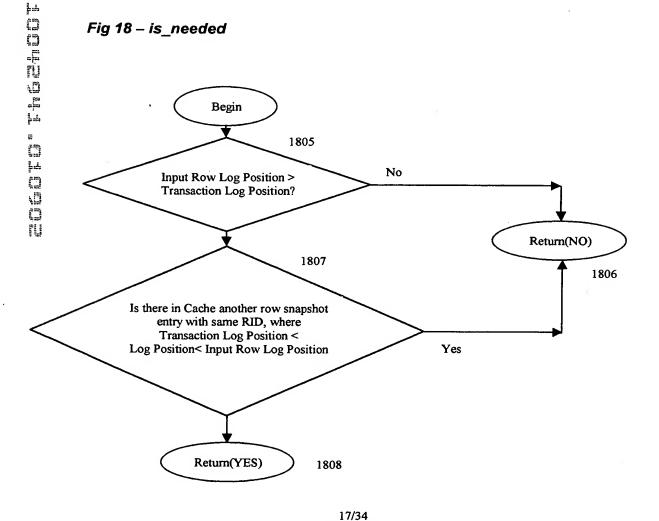
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Fig 17 – Supporting snapshots

1701	1702	1703	1704	1705
Transaction ID	Log Position	Time Stamp	Process ID	Next Entry
		L		

1801	1802	1803	1804
Table ID	Row ID	Log Position	Before Image
		1800	

Fig 18 - is\_needed



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Fig 19 - Start a serializable transaction

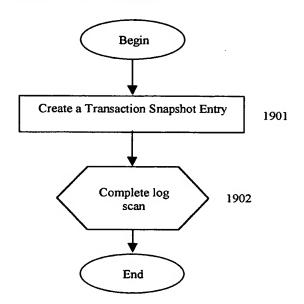


Fig 20 - Snapshot Read

